AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-9 (Canceled).

10. (Currently Amended) A turbine having multiple turbine stages, first and second turbine stages comprising:

a wheel having sixty broach slots, each one of said broach slots having an interleaved system of fillets and tangs; and

a plurality of buckets each having a corresponding interleaved system of fillets and tangs so that said plurality of buckets can be fitted, one to one, into said sixty broach slots on said wheel;

wherein said interleaved system of fillets and tangs on said buckets and wheelposts act to reduce stresses acting on said fitted buckets and wheelposts, the fillets and tangs of said interleaved system of fillets and tangs each being formed by a combination of curved and straight surfaces;

wherein ~~an angle formed by tangent lines along~~ the uppermost tangs on each ~~either~~ side of a center line bisecting each of said buckets define two points of a respective line that form an angle of 20.782° with the center line, each of said points being determined by intersecting tangent lines along pressure faces of the respective said uppermost tangs, and; ~~is 41.564°;~~

wherein a point defined by intersecting tangent lines along pressure faces of the bottom most tang does not lie on either line that forms the angle of 20.782° with the center line. ~~along said tangent lines forming said angle.~~

11. (Currently Amended) A turbine having multiple turbine stages, first and second turbine stages comprising:

a wheel having sixty broach slots, each one of said broach slots having an interleaved system of fillets and tangs; and

a plurality of buckets each having a corresponding interleaved system of fillets and tangs so that said plurality of buckets can be fitted, one to one, into said sixty broach slots on said wheel;

wherein said interleaved system of fillets and tangs on said buckets and wheelposts act to reduce stresses acting on said fitted buckets and wheelposts, the fillets and tangs of said interleaved system of fillets and tangs each being formed by a combination of curved and straight surfaces;

wherein a point defined by intersecting tangent lines along pressure faces of ~~an angle formed by tangent lines along~~ the uppermost fillets ~~filets~~ on each ~~either~~ side of a center line bisecting each of said wheelposts define two points of a respective line that form an angle of 20.782° with the center line, each of said points being determined by intersecting tangent lines along pressure faces of the respective said uppermost fillets, and; ~~is 41.564°;~~

wherein a point defined by intersecting tangent lines along pressure faces of the bottom most fillet ~~filet~~ does not lie on either line that forms the angle of 20.782° with the center line. ~~along said tangent lines forming said angle.~~

12. (Original) A turbine as claimed in claim 11, wherein the fillets formed on said plurality of buckets have angles ranging from 50° to 57°.

13. (Original) A turbine as claimed in claim 10, each one of said buckets and wheelposts having three interleaved tangs and fillets.

14. (Original) A turbine as claimed in claim 13, wherein each of said buckets having a bottom tang formed from curved surfaces having more than one radius of curvature.

15. (Original) A turbine as claimed in claim 14, wherein each of said buckets further includes at least one straight surface.

16. (Original) A turbine as claimed in claim 10, wherein each of said wheelposts having a bottom fillet formed from curved surfaces having more than one radius of curvature.

17. (Original) A turbine as claimed in claim 16, wherein each of said wheelposts further includes at least one straight surface.

18. (Previously Presented) A turbine as claimed in claim 14, wherein said curved surfaces have radii of curvatures of .3762 inches and .5556 inches.

19. (Previously Presented) A turbine as claimed in claim 16, wherein said curved surfaces have radii of curvatures of .3822 inches and .5616 inches.

20. (Original) A turbine as claimed in claim 10, wherein a top surface of each one of said wheelposts being scalloped so as to reduce the weight of said wheel.

21. (Original) A turbine as claimed in claim 11, each one of said buckets and wheelposts having three interleaved tangs and fillets.

22. (Original) A turbine as claimed in claim 21, wherein each of said buckets having a bottom tang formed from curved surfaces having more than one radius of curvature.

23. (Original) A turbine as claimed in claim 22, wherein each of said buckets further includes at least one straight surface.

24. (Original) A turbine as claimed in claim 21, wherein each of said wheelposts having a bottom fillet formed from curved surfaces having more than one radius of curvature.

25. (Original) A turbine as claimed in claim 11, wherein each of said wheelposts further includes at least one straight surface.

26. (Previously Presented) A turbine as claimed in claim 22, wherein said curved surfaces have radii of curvatures of .3762 inches and .5556 inches.

27. (Previously Presented) A turbine as claimed in claim 24, wherein said curved surfaces have radii of curvatures of .3822 inches and .5616 inches.

28. (Original) A turbine as claimed in claim 11, wherein a top edge of each one of said wheelposts being scalloped so as to reduce the weight of said wheel.

29. (Currently Amended) A bucket for insertion into a wheelpost of a turbine rotor in a first or second stage of a turbine, said bucket being formed from interleaved fillets and tangs which complement interleaved fillets and tangs formed in the wheelpost,

wherein said interleaved system of fillets and tangs on said buckets and wheelposts act to reduce stresses acting on said fitted buckets and wheelposts, the fillets and tangs of said interleaved system of fillets and tangs each being formed by a combination of curved and straight surfaces;

wherein the uppermost tangs on each side of a center line bisecting each of said buckets define two points of a respective line that form an angle of 20.782° with the center line, each of said points being determined by intersecting tangent lines along pressure faces of the respective said uppermost tangs, and;

wherein a point defined by intersecting tangent lines along pressure faces of the bottom most tang does not lie on either line that forms the angle of 20.782° with the center line. ~~an angle formed by tangent lines along the uppermost tangs on either side of a center line bisecting each of said buckets is 41.564° and the bottom most tang does not lie along said tangent lines forming said angle.~~

30. (Original) A bucket as claimed in claim 29, said bucket having three interleaved tangs and fillets.

31. (Original) A bucket as claimed in claim 30, said bucket having a bottom tang formed from curved surfaces having more than one radius of curvature.

32. (Original) A bucket as claimed in claim 31, said bucket further including at least one straight surface.

33. (Original) A bucket as claimed in claim 31, said curved surfaces having radii of curvatures of .3762 inches and .5556 inches.

34. (Original) A bucket as claimed in claim 30, said bucket having an upper tang formed from curved surfaces having more than one radius of curvature.

35. (Original) A bucket as claimed in claim 31, said bucket having an upper tang formed from curved surfaces having more than one radius of curvature.

36. (Original) A bucket as claimed in claim 34, said bucket further including at least one straight surface.

37. (Original) A bucket as claimed in claim 30, said bucket having an intermediate tang formed from curved surfaces having more than one radius of curvature.

38. (Original) A bucket as claimed in claim 31, said bucket having an intermediate tang formed from curved surfaces having more than one radius of curvature.

39. (Original) A bucket as claimed in claim 35, said bucket having an intermediate tang formed from curved surfaces having more than one radius of curvature.

40. (Original) A bucket as claimed in claim 37, said bucket further including at least one straight surface.